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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/631,511	08/03/2000	Behnam S. Katibian	B67933 (044368/0372)	9161
20594	7590	07/06/2004	EXAMINER	
CHRISTOPHER J. ROURK AKIN, GUMP, STRAUSS, HAUER & FELD, L.L.P. P O BOX 688 DALLAS, TX 75313-0688			ALI, SYED J	
			ART UNIT	PAPER NUMBER
			2127	

DATE MAILED: 07/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/631,511

Applicant(s)

KATIBIAN ET AL.

Examiner

Syed J Ali

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 April 2004.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-20 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 03 August 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____

DETAILED ACTION

1. This office action is in response to the response filed April 26, 2004. Claims 1-20 are presented for examination.
2. The text of those sections of Title 35, U.S. code not included in this office action can be found in a prior office action.
3. Applicant's arguments, see pages 2-4, filed April 26, 2004, with respect to the rejection of claims 1-20 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn.

Claim Rejections - 35 USC § 103

4. **Claims 1-7 and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richter et al. (USPN 6,738,357) (hereinafter Richter).**
5. As per claim 1, Richter teaches the invention as claimed, including a system for processing audio and video data comprising:
 - an audio sampler receiving audio data (Fig. 7A, element 702; col. 7 lines 18-34) and converting the audio data to digitally encoded audio data (Fig. 7A, element 708; col. 7 lines 18-34);
 - a digital imager receiving image data (Fig. 7A element 704; col. 7 lines 18-34) and converting the image data to digitally encoded image data (Fig. 7A element 710; col. 7 lines 18-34);

a processor coupled to the audio sampler and the digital imager and receiving the digitally encoded audio data and the digitally encoded image data (col. 7 lines 27-29; col. 7 lines 41-44), the processor giving processing priority to one of the digitally encoded audio data and the digitally encoded image data (col. 1 line 63 - col. 2 line 13); and

wherein the audio data and the video data can be received over a same communications channel in a single transmission system (col. 12 line 65 - col. 13 line 18).

6. Although Richter does not explicitly state that the processing system is for a wireless handset, such is provided for, in that the method is a software method. The method is hardware independent, and is capable of working on any medium that supports audiovisual processing, and on any available communications environment, including wireless (col. 13 lines 59-67). As the use of audio and video data on wireless handsets is well known (see Rostoker et al.; USPN 6,111,863), the method of Richter is applicable to wireless handsets.

7. As per claim 2, Richter teaches the invention as claimed, including the system of claim 1 wherein the processor further comprises a controller providing control data to the audio sampler that causes the audio sampler to change the rate of audio sampling (col. 1 line 63 - col. 2 line 13; Claim 23).

8. As per claim 3, Richter teaches the invention as claimed, including the system of claim 1 wherein the processor further comprises a controller providing control data to the

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digital imager that causes the digital imager to change the rate of digital image data generation (col. 1 line 63 - col. 2 line 13; Claim 23).

9. As per claim 4, Richter teaches the invention as claimed, including the system of claim 1 wherein the processor further comprises a multiplex system that controls the assembly of the digitally encoded audio data and the digitally encoded image data into a transmission data packet (Abstract; col. 1 line 63 - col. 2 line 13).

10. As per claim 5, Richter teaches the invention as claimed, including the system of claim 1 wherein the processor further comprises a logical channel controller system that controls the assembly of the digitally encoded audio data and the digitally encoded image data into two or more logical channels (col. 12 line 65 - col. 13 line 33).

11. As per claim 6, Richter teaches the invention as claimed, including the system of claim 1 wherein the processor further comprises a transmission protocol system that controls the placement of transmission protocol data in a transmission data packet (col. 6 line 57 - col. 7 line 17).

12. As per claim 7, Richter teaches the invention as claimed, including the system of claim 1 wherein the processor further comprises a data buffer system storing logical channel data for one or more logical channels and transmission buffer data (col. 7 lines 18-34).

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13. As per claim 17, Richter teaches the invention as claimed, including a system for processing audio data and video data comprising:

an audio data processor receiving audio data (Fig. 7A, element 702; col. 7 lines 18-34) and processing the audio data to generate audio service data (Fig. 7A, element 708; col. 7 lines 18-34);

a video data processor receiving video data (Fig. 7A element 704; col. 7 lines 18-34) and processing the video data to generate video service data (Fig. 7A element 710; col. 7 lines 18-34);

a controller coupled to the audio data processor and the video data processor, the controller receiving the audio service data and the video service data and generating video control data therefrom (Abstract; col. 1 line 63 - col. 2 line 13; col. 2 lines 17-25; col. 7 lines 20-34); and

wherein the audio data and the video data can be received over a same communications channel in a single transmission system (col. 12 line 65 - col. 13 line 18).

14. Although Richter does not explicitly state that the processing system is for a wireless handset, such is provided for, in that the method is a software method. The method is hardware independent, and is capable of working on any medium that supports audiovisual processing, and on any available communications environment, including wireless (col. 13 lines 59-67). As the use of audio and video data on wireless handsets is well known (see Rostoker et al.; USPN 6,111,863), the method of Richter is applicable to wireless handsets.

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15. As per claim 18, Richter teaches the invention as claimed, including the system of claim 17 wherein the controller further comprises a digital image rate controller generating control data to reduce the rate of digital image generation (col. 1 line 63 - col. 2 line 13; Claim 23).

16. As per claim 19, Richter teaches the invention as claimed, including the system of claim 17 wherein the controller further comprises an audio sample rate controller generating control data to reduce the rate of audio sampling (col. 1 line 63 - col. 2 line 13; Claim 23).

17. As per claim 20, Richter teaches the invention as claimed, including the system of claim 17 wherein the controller further comprises a framing system assembling the audio service data and the video service data into a transmission data frame (col. 6 line 57 - col. 7 line 17).

18. Claims 8-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richter in view of Rostoker et al. (USPN 6,111,863) (hereinafter Rostoker).

19. As per claim 8, Richter teaches the invention as claimed, including a method for processing data comprising:

processing audio data before processing video data if a priority designated is for audio data (col. 2 lines 17-36); and

wherein the audio data and the video data can be received over a same communications channel in a single transmission system (col. 12 line 65 - col. 13 line 18).

20. Although Richter does not explicitly state that the processing system is for a wireless handset, such is provided for, in that the method is a software method. The method is hardware independent, and is capable of working on any medium that supports audiovisual processing, and on any available communications environment, including wireless (col. 13 lines 59-67). As the use of audio and video data on wireless handsets is well known (see Rostoker et al.; USPN 6,111,863), the method of Richter is applicable to wireless handsets.

21. Rostoker teaches the invention as claimed, including the following limitations not shown by Richter:

receiving a priority designator (col. 4 line 66 - col. 5 line 7); and

determining whether the priority designator is for audio data or video data (col. 4 lines 30-58; col. 4 line 66 - col. 5 line 7); and

processing video data before audio data if the priority designator is for video data (col. 4 line 66 - col. 5 line 7).

22. It would have been obvious to one of ordinary skill in the art to combine Richter and Rostoker since the method of Richter suffers the drawback of having audio data fixed at a higher priority than video data. Such may be undesirable in certain circumstances, particularly where the user has preference for the video data. Rostoker provides a means of changing the priority designation from audio to video or vice versa using a

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multiplexing scheme. The combination thereof would allow a device to process one type of signal over another at the user's discretion.

23. As per claim 9, Rostoker teaches the invention as claimed, including the method of claim 8 wherein processing the audio data before the video data if the priority designator is for audio data further comprises setting a multiplex table to an audio priority entry (col. 4 line 66 - col. 5 line 7).

24. As per claim 10, Richter teaches the invention as claimed, including the method of claim 8 wherein processing the audio data before the video data if the priority designator is for audio data further comprises setting a video encoder data rate (col. 1 line 63 - col. 2 line 13; Claim 23).

25. As per claim 11, Rostoker teaches the invention as claimed, including the method of claim 8 wherein processing the video data before the audio data if the priority designator is for video data further comprises setting a multiplex table to a video priority entry (col. 4 line 66 - col. 5 line 7; col. 5 lines 29-45).

26. As per claim 12, Richter teaches the invention as claimed, including the method of claim 8 wherein processing the video data before the audio data if the priority designator is for video data further comprises setting an audio sample rate (col. 1 line 63 - col. 2 line 13; Claim 23).

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27. As per claim 13, Rostoker teaches the invention as claimed, including the method of claim 8 further comprising:

determining whether a priority designator change has been received (col. 4 line 66 - col. 5 line 7); and

reversing the processing priority of the audio data and the video data (col. 4 line 66 - col. 5 line 7; col. 5 lines 29-45).

28. As per claim 14, Richter teaches the invention as claimed, including the method of claim 8 wherein processing audio data further comprises:

assembling a payload data field (col. 6 line 57 - col. 7 line 17);

assembling a CRC data field using the payload data field (col. 6 line 57 - col. 7 line 17); and

assembling a service data unit from the payload data field and the CRC data field (col. 6 line 57 - col. 7 line 17).

29. As per claim 15, Richter teaches the invention as claimed, including the method of claim 8 further comprising:

assembling an audio data unit from the processed audio data (col. 6 line 57 - col. 7 line 17);

assembling a video data unit from the processed video data (col. 6 line 57 - col. 7 line 17); and

assembling a transmission data unit from the audio data unit and the video data unit (col. 6 line 57 - col. 7 line 17).

30. As per claim 16, Richter teaches the invention as claimed, including the method of claim 15 wherein assembling the transmission data unit from the audio data unit and the video data unit further comprises:

placing a flag data unit in a first sequence position and a last sequence position (col. 6 line 57 - col. 7 line 17);

placing a header data unit in a second sequence position (col. 6 line 57 - col. 7 line 17); and

placing the audio data unit and the video data unit in one or more sequence positions between the second sequence position and the last sequence position according to predetermined criteria (col. 6 line 57 - col. 7 line 17).

Response to Arguments

31. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new grounds of rejection.

Conclusion

32. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kiriyama (USPN 5,561,466) teaches a method of multiplexing an audio signal and a video signal and buffering the combined signals, while providing priority to the audio signal.

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Wu et al. (USPN 5,982,360) teaches providing memory priority to one of an audio and video signal in an MPEG processor.

Huang et al. (USPN 6,016,166) teaches synchronization of audio and video signals, while providing priority to the audio.

Komi et al. (USPN 6,477,185) teaches a demultiplexer for processing a combined audio and video signal, while providing priority on a packet-to-

packet basis based on information encoded within the packet.

Putzolu (USPN 6,584,509) teaches a method for processing audio and video packets, while providing priority based on information encoded within the packet.

Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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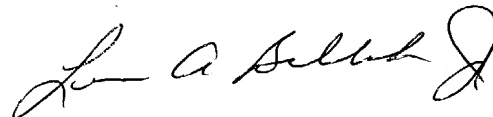
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Syed J Ali whose telephone number is (703) 305-8106.

The examiner can normally be reached on Mon-Fri 8-5:30, 2nd Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai T An can be reached on (703) 305-9678. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Syed Ali
February 20, 2004

A handwritten signature in black ink, appearing to read 'Syed Ali', with a stylized flourish at the end.